LIST OF CONTENTS

VOLUME 20 (1992)

Number 1

Jorge Hernández-R.	1	Invited Review: Na^+/K^+-ATPase regulation by neurotransmitters
E. S. Vizi and F. Oberfrank	11	Critique: Na^+/K^+-ATPase, its endogenous ligands and neurotransmitter release
J. W. Phillis	19	Critique: Na^+/K^+-ATPase as an effector of synaptic transmission
Jolanta B. Zawilska and Jerzy Z. Nowak	23	Commentary: Regulatory mechanisms in melatonin biosynthesis in retina
Ray W. Fuller, Susan K. Hemrick-Luecke and John S. Ward	37	Potent *in vivo* but not *in vitro* inhibition of monoamine oxidase by 3-chloro-α-phenylpyrazinemethanol
M. J. Neal, J. R. Cunningham, P. H. Hutson and J. E. Semark	43	Calcium dependent release of acetylcholine and γ-aminobutyric acid from the rabbit retina
A. Henkel and H. Zimmermann	55	*In vitro* binding of isolated synaptic vesicles to presynaptic plasma membranes: activation by Ca^{2+} and protein kinase C
Tatsuo Suzuki, Sumiko Abe-Dohmae and Ryo Tanaka	61	P_{400} protein is one of the major substrates for Ca^{2+} calmodulin-dependent protein kinase II in the postsynaptic density-enriched fraction isolated from rat cerebral cortex, hippocampus and cerebellum
V. K. Saxena, P. Partoens, J. de Block, E. P. Coen, G. Vauquelin and W. P. De Potter	69	Inhibition of evoked neurotransmitter release from rat hippocampus by a polypeptide toxin isolated from the marine snail *Conus distans*
S. P. Butcher, D. Cameron, L. Kendall and R. Griffiths	75	Homocysteine-induced alterations in extracellular amino acids in rat hippocampus
Virendra B. Singh, Tam Hao-Phan, Karl C. Corley and Margaret C. Boadle-Biber	81	Increase in cortical and midbrain tryptophan hydroxylase activity by intracerebroventricular administration of corticotropin releasing factor: block by adrenalectomy, by RU 38486 and by bilateral lesions to the central nucleus of the amygdala
A. Pasi, P. Mehraein, A. Jehle, M. Traub, G. Morniroli, W. Bär and N. Kopp	93	β-Endorphin: regional levels profile in the brain of the human infant
A. Coquerel, M. Buser, J. Tayot, F. Pfaff, F. Matray and B. Proust	97	Beta-endorphin and neurotensin in brainstem and cerebrospinal fluid in the Sudden Infant Death Syndrome
M. P. Morin-Surun, E. Boudinot, M. C. Fournie-Zaluski, J. Champagnat, B. P. Roques and M. Denavit-Saubie	103	Control of breathing by endogenous opioid peptides: possible involvement in Sudden Infant Death Syndrome
Paul Schweitzer, Gilles Fortin, Jean-Claude Beloeil and Jean Champagnat	109	*In vitro* study of newborn rat brain maturation: implication for Sudden Infant Death Syndrome
F. Chigr, D. Jordan, M. Najimi, L. Denoroy, A. Sarrieau, A. de Broca, W. Rostene, J. Epelbaum and N. Kopp	113	Quantitative autoradiographic study of somatostatin and neurotensin binding sites in medulla oblongata of SIDS
Madhu Kalia	119	Early ontogeny of the vagus nerve: an analysis of the medulla oblongata and cervical spinal cord of the postnatal rat

Eleni Dicou — 129 A Rapid Publication: Expression of recombinant human nerve growth factor in *Escherichia coli*

135 Book Reviews

137 News Items

Number 2

1 Editorial

M. B. A. Djamgoz and H.-J. Wagner — 139 Invited Review: Localization and function of dopamine in the adult vertebrate retina

Joseph C. Besharse and P. Michael Iuvone — 193 Critique: Is dopamine a light-adaptive or a dark-adaptive modulator in retina?

Dai-Eun Sok, Yun-Bae Kim, Seung-Hee Cha and Yun-Su Chung — 201 Effect of choline esters on the decarbamylation of dimethylcarbamyl-acetylcholinesterase

Anja Garritsen, Margot W. Beukers, Ad P. Ijzerman, Edward J. Cragoe Jr and Willem Soudijn — 207 The mode of interaction of amiloride and some of its analogues with the adenosine A_1 receptor

Philippe Bertrand, Olivier Roger, Rémi Houlgatte, France Javoy-Agid, Jean-Philippe Brandel, Adam Doble and Jean-Charles Blanchard — 215 Measurement of nerve growth factor-like immunoreactivity in human brain using an anti-mouse-NGF enzyme immunoassay

Zipora Pittel, Eliahu Heldman, Rachel Rubinstein and Sasson Cohen — 219 Inhibition of choline efflux results in enhanced acetylcholine synthesis and release in the guinea-pig corticocerebral synaptosomes

Kyoji Morita, Kazuhiko Teraoka, Motoo Oka and Shuichi Hamano — 229 Further studies on the relationship between tyrosine supply and catecholamine production in cultured adrenal chromaffin cells

Diana Jerusalinsky, Carlos Cerveñansky, Clara Peña, Sonia Raskovsky and Federico Dajas — 237 Two polypeptides from *Dendroaspis angusticeps* venom selectively inhibit the binding of central muscarinic cholinergic receptor ligands

Elizabeth S. Lapadula, Daniel M. Lapadula and Mohamed B. Abou-Donia — 247 Biochemical changes in sciatic nerve of hens treated with tri-*o*-cresyl phosphate: increased phosphorylation of cytoskeletal proteins

Maria Clara Gravielle, Vladimir Flores and Sara Fiszer de Plazas — 257 The postnatal development of benzodiazepine receptor sites in the chick optic lobe is modulated by environmental lighting

J. M. Pocock, V. J. Venema and M. E. Adams — 263 ω-Agatoxins differentially block calcium channels in locust, chick and rat synaptosomes

271 Book Review

273 News Items

Number 3

Erwin Tareilus and Heinz Breer	275	Rapid kinetics of depolarization-induced changes in intrasynaptosomal calcium concentrations
A. M. Duchemin, K. P. Gudehithlu, N. H. Neff and M. Hadjiconstantinou	281	*c-fos* mRNA in mouse brain after MPTP treatment
D. Maysinger, B. R. Leavitt, B. Zorc, I. Butula, L. G. Fernandes and A. Ribeiro-da-Silva	289	Inhibition of high affinity choline uptake in the rat brain by neurotoxins: effect of monosialoganglioside GM1
Hitoshi Aoshima, Yuichi Inoue and Daisuke Tanaka	299	A minimal model to account for the response of *N*-methyl-D-aspartate receptors expressed in *Xenopus* oocyte injected with rat brain mRNA
Alison M. McDermott, Stephen L. Dickinson and Graham P. Wilkin	307	Thyrotropin releasing hormone (TRH) and a degradation stabilized analogue (RX77368) stimulate phosphoinositide turnover in cultured astrocytes in a regionally specific manner
Sandro Sonnino, Vanna Chigorno, Manuela Valsecchi, Marina Pitto and Guido Tettamanti	315	Specific ganglioside–cell protein interactions: a study performed with GM1 ganglioside derivative containing photoactivable azide and rat cerebellar granule cells in culture
Hinrich Rahmann, Florian Schifferer and Heinz Beitinger	323	Calcium–ganglioside interactions and synaptic plasticity: effect of calcium on specific ganglioside/peptide (valinomycin, gramicidin A)-complexes in mixed mono- and bilayers
H. Rösner, M. Al-Aqtum and H. Rahmann	339	Gangliosides and neuronal differentiation
A. Ben Younes-Chennoufi, V. Meininger, J. M. Léger, P. Bouche, M. O. Jauberteau and N. Baumann	353	Antiganglioside antibodies in motor-neuron diseases and peripheral neuropathies: study by ELISA technique and immunodetection on thin-layer chromatography
P. Bellato, F. Milan, E. Facchinetti and G. Toffano	359	Disposition of exogenous tritium-labelled GM_1 lactone in the rat
O. B. Karpova, V. A. Zinserling and N. F. Avrova	365	Study of brain and vascular plexus gangliosides in meningoencephalites of various etiology
H. Rahmann, H. Rösner, U. Sonnentag and S. Esders	371	Gangliosides and regeneration of the goldfish optic nerve *in vivo* and *in vitro*
Christoph Berndt, Brigitte Brux, Andreas Lun and Johann Gross	385	Lasting effects of postnatal hypoxia and saline injection on the striatal dopamine transport and their modification by gangliosides
Slobodan Vukicevic, Ivica Kracun, Zeljka Vukelic, Burkhard Krempien, Harald Rosner and Cedomir Cosovic	391	24R, 25-dihydroxyvitamin D_3 prevents aluminum-induced alteration of brain gangliosides in uremic rats by keeping the metal within perivascular astrocytes of the blood–brain barrier
Vladimir A. Tyurin, Yulia Yu. Tyurina and Natalia F. Avrova	401	Ganglioside-dependent factor, inhibiting lipid peroxidation in rat brain synaptosomes
H. Rösner, M. Al-Aqtum, U. Sonnentag, A. Wurster and H. Rahmann	409	Cell surface distribution of endogenous and effects of exogenous gangliosides on neuronal survival, cell shape and growth *in vitro*
Ivica Kracun, Harald Rosner, Valerija Drnovsek, Zeljka Vukelic, Cedomir Cosovic, Milica Trbojevic-Cepe and Milovan Kubat	421	Gangliosides in the human brain development and aging
Ivica Kracun, Svjetlana Kalanj, Jasna Talan-Hranilovic and Cedomir Cosovic	433	Cortical distribution of gangliosides in Alzheimer's disease
	439	News Items

Number 4

Clive R. Bramham	441	Invited Review: Opioid receptor dependent long-term potentiation: peptidergic regulation of synaptic plasticity in the hippocampus
John J. Wagner and Charles Chavkin	457	Critique: Endogenous opioids and LTP: another view
Daniel Johnston	461	Critique: NMDA-receptor independent LTP
Li-Yen Mae Huang	463	Critique: The excitatory effects of opioids
Laurent Aniksztejn and Yehezkel Ben-Ari	469	Critique: Opioid peptides and long-term potentiation
K. M. Boje, P. Skolnick, J. Raber, R. T. Fletcher and G. Chader	473	Strychnine-insensitive glycine receptors in embryonic chick retina: characteristics and modulation of NMDA neurotoxicity
G. Gupta, M. Azam and N. Z. Baquer	487	Modulation of rat brain insulin receptor kinase activity in diabetes
Jin-ichi Ito, Taiji Kato and Ryo Tanaka	493	Interaction of sialosyl cholesterol with the cell surface of rat astrocytes and its biological activities
Jack C. Brooks and Melinda H. Brooks	501	Thiophosphorylated proteins in chromaffin cells are chromaffin vesicle matrix proteins
Jack C. Brooks, Melinda H. Brooks and Stephen W. Carmichael	511	Inorganic thiophosphate effects on chromaffin cell structure and function
Hugo D. Lacorazza, Marcela S. Otero de Bengtsson and Mirtha Biscoglio de Jiménez Bonino	521	Role of histidine residues in the α-bungarotoxin binding site of the nicotonic acetylcholine receptor
C. Simon, P. Portalier, M. C. Chamoin and J. P. Ternaux	529	Substance P like-immunoreactivity release from enterochromaffin cells of rat caecum mucosa. Inhibition by serotonin and calcium-free medium
Shigeru Mitsuka, Mirko Diksic, A. Takada and Y. Lucas Yamamoto	537	Influence of the tumor mass on the valine rate constants and on valine incorporation into proteins in an experimental brain tumor model
S. Chaki, M. Muramatsu, Y. Ushiyama and S. Otomo	553	Purification and partial characterization of K^+ channel blockers from the venom of *Dendroaspis angusticeps*
B. V. Ravi Kumar and P. S. Sastry	559	Dopamine receptors in human foetal brains: characterization, regulation and ontogeny of [^{3}H]spiperone binding sites in striatum
Niels Westergaard, Orla M. Larsson, Bente Jensen and Arne Schousboe	567	Synthesis and release of GABA in cerebral cortical neurons co-cultured with astrocytes from cerebral cortex or cerebellum
B. Miserez, J. De Block, R. Cortvrindt, E. Van Marck and W. P. De Potter	577	Preparation of noradrenaline-storing organelles from bovine sympathetic ganglia: biochemical and morphological evaluation of partly purified large dense cored vesicles
Mizuo Takashima, Masatoshi Takita, Asami Umino, Toru Nishikawa, Hiroshi Mitsushio and Kiyohisa Takahashi	583	Modulation of cerebral acetylcholine metabolism by the dorsal diencephalic conduction system in the rat
Patricia G. Schneider, Elena Girardi and Georgina Rodriguez de Lores Arnaiz	591	3-Mercaptopropionic acid administration increases the affinity of [^{3}H]quinuclidinyl benzilate binding to membranes of the striatum and cerebellum
	599	News Items

VOL. 20 SUPPLEMENT

Dopaminergic Systems and their Regulation—Satellite Meeting of the XIth International Congress of Pharmacology was produced as a supplement to the journal during 1992. It was supplied to all subscribers in March 1992.